

-continued

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1. A combination treatment of a patient in need thereof, comprising:

administering a combination of i) an inhibition or disruption agent which inhibits or disrupts DNA licensing machinery and/or DNA replication initiation machinery and ii) a cytotoxic agent which acts in either G2, M and/or S phases of a cell cycle, thereby shielding normal cells during cancer treatment of the patient, wherein the inhibition or disruption agent is administered to the patient first in an amount sufficient to reversibly arrest normal cells in G1 phase, and the cytotoxic agent is administered at a subsequent time.

2. The combination treatment according to claim 1 wherein the inhibition or disruption agent inhibits or disrupts one or more of Cdc-7, ORC1-6, Cdc6, MCM2-7, Cdt1, Dbf4 Cdc45, GINS, Pole, Mcm10, Sid3, Sid5, Sid7, Sid2, Dpb11, Pola, Ctf4, PCNA, Pfs1, Pfs2 and Pfs3.

3. The combination treatment according to claim 1 wherein the cytotoxic agent is paclitaxel or 5-fluorouracil.

4. The combination treatment according to claim 1 wherein the subsequent time following administration of agent (i) is in the range of from 1-60 hours later.

5. The combination treatment according to claim 4 wherein the subsequent time following administration of agent (i) is in the range from 12 to 48 hours later.

6. A packaged dosage unit, comprising:

a first pharmaceutical composition comprising an inhibition or disruption agent which inhibits or disrupts the DNA licensing machinery and/or the DNA replication initiation machinery, and a pharmaceutically acceptable carrier; and

a second pharmaceutical composition comprising a cytotoxic agent which acts in one or more of G2, M and/or S phases of a cell cycle, and a pharmaceutically acceptable carrier.

7. A method of shielding normal cells during cancer treatment, said method comprising administering to a patient in need thereof, an effective amount of a combination according to claim 1; wherein the inhibition or disruption agent which inhibits or disrupts the DNA licensing machinery and/or the DNA replication initiation machinery (i) is administered to the patient and the cytotoxic agent (ii) is administered subsequently.